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EXAMINER

MCCALL, ERIC SCOTT

ART UNIT

PAPER NUMBER

2855

DATE MAILED: 07/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/879,488

Applicant(s)

SUNDERMANN ET AL.

Examiner

Eric S. McCall

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 May 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 and 13-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 13-53 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other:

**COLLIMATION DEVICE, RADIOLOGY  
APPARATUS, TEST KIT AND METHOD OF  
TESTING A RADIOLOGY APPARATUS**

**FIRST OFFICE ACTION ON THE MERITS**

In response to the Applicant's amendment/election (paper no. 4) dated May 15, 2003.

**ELECTION**

In response to the Examiner's restriction requirement, the Applicant has elected claims 1-9 and has stated that said election is made with traverse. However, the Applicant has provided no arguments traversing the restriction and has even cancelled the non-elected claims 10-12. Thus, it is unclear as to why the restriction would be traversed if the non-elected claims are cancelled. As such, the Examiner has interpreted the election as being made without traverse.

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**DRAWINGS**

\* look into this  
The drawings are objected to because the Applicant has failed to clearly label the block diagrams of figs. 8 & 9.

Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawings. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

**ABSTRACT**

✓ Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because of the use of the legal phraseology "means" throughout. Correction is required. See MPEP § 608.01(b).

**CLAIMS**

*Objections*

✓ The Applicant has stated in said amendment that claims 13 to 54 have been added.

However, the Examiner points out that a claim 33 was not added.

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are cancelled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

As such, misnumbered added claims 13-54 have been renumbered 13-53.

*35 U.S.C. § 112*

*(First Paragraph)*

In said amendment, the Applicant has added in excess of 40 claims. However, the Applicant has failed to point out where in the originally filed disclosure support for all of the added claims can be found. The Examiner points out that the originally filed disclosure is relatively short and thus the Examiner is having trouble finding support for many of the added

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claims. Thus, the Applicant is ask to point out where in the originally filed disclosure support can be found for all of the added claims. Nonetheless, the following applies:

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 13-15, 18, 20-22, 25, 26, 28-33, 35-37, 40, 44, 45, and 47-52 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention because said added claims contain subject matter which can not be found to be clearly supported by the originally filed disclosure.

*(Second Paragraph)*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8, 13-41, and 46-53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention because said claims are replete with language deemed

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indefinite. However, because of the vast amount of problems, the Examiner has not pointed out each and every problem, for the Examiner has only provided the Applicant with a few examples of such problems. The Applicant is ask to carefully review all of the claims and amend any indefinite language or any language which contradicts any language previously used by that claim.

Claim 1, lines 2 and 3; the phrase "capable of being" is of indefinite language and

✓ thus indefinite as to whether the limitations which follow are a required part of the claim;

✓ line 6; the phrase "the collimation device" is indefinite because as set forth, the collimation device is a required element but in lines 2/3 of the claim, the collimation device is not a required element for the collimation device only has to be "capable of" being installed at an output;

✓ Claim 2, ✓ line 2; the phrase "the operating parameters" lacks antecedent basis;

✓ line 2; the phrase "intended to be used" is indefinite as to whether the limitations which follow are a required part of the claim;

✓ Claims 5 & 6, line 3; "capable of being" (see above);

✓ Claim 8, last line; the phrase "a sensor of the position of each test tool" is grammatically confusing;

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✓ Claim 21, the limitation of the means for testing being separate from the collimation device contradicts that of claim 1, from which claim 21 depends, which states that the collimation device comprises a means for testing;

✓ Claims 32 and 51, the limitation in the body of the claim of the rotatable cylinder having on the periphery thereof the plurality of elements contradicts the preamble of the claim which states that "the plurality of elements comprises" the rotatable cylinder;

✓ Claim 35, line 3; the phrase "the means for receiving" lacks antecedent basis; and

✓ Claims 36-41, line 1; the phrase "the plurality of elements" lacks antecedent basis.

Also, claims 3-6, 9, and 35-53 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are as follows:

✓ Claims 3 and 4 both depend from claim 1 but uncertainty exists as to how the subject matter of claims 3 and 4 relate to claim 1; and

✓ Claim 9 is indefinite as to how the given elements of said claim relate with one another.



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35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-9, 13-20, 22, 23, 25-27, 29, 30, 32, 35-42, 44-46, 48, 49, and 51 are rejected under 35 U.S.C. 102(b) as being anticipated by Oikawa (5,625,661).

Oikawa teaches a collimation device (13) to direct an energy beam in a given direction and at a given solid angle (fig. 4), the collimation device capable of being installed at an output of means for emission (11) of an energy beam and capable of being connected to a control unit, comprising:

means for testing (fig. 19) operation of an assembly formed by the means for emission of an energy beam and the collimation device and means for receiving the energy beam;

the means for testing (fig. 19) comprising:

means for providing a plurality of test tools (slits 62 in fig. 19; ie. the Applicant has disclosed such slits as the “test tools”); and

means for sensing (63) the position of each test tool.

With regard to claims 2 and 5, it is inherent that the prior art's means for emission (11) has a control unit and that the control parameters thereof are going to be calibrated, for if the parameters were not calibrated, the emission device would not operate properly.

With regard to claims 3 and 4, the means for emission (11) of the prior art is tested. Furthermore, the means for emission is an energy beam emission tube as claimed.

With regards to independent claim 8, said claim parallels that of claim 1 and thus the corresponding comments pertaining to claim 1 also apply to claim 8. Said comments clearly demonstrate the Examiner's position on claim 8.

With regards to independent claim 9 and in addition to the above comments pertaining to claim 1, the position sensor (63) of the collimation device (61) of the prior art in fig. 19 is in a fixed relationship with the collimation device and senses the position, and thus tests, the collimation device. Thus, the position sensor (63) of the prior art is interpreted as the "test kit" as claimed. Furthermore, the slits (62) of the collimation device are interpreted as the "plurality of test tools" as claimed because the Applicant has disclosed that such slits are the tools as claimed.

With regard to claims 13-19, the plurality of slits (62) of the prior art are the plurality of elements as claimed wherein the slits test spectral quality, calibrate radiation dose, evaluate

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image quality, block the energy beam, permit the energy beam, and provide a phantom (col. 11, lines 65+ and figs. 19 & 20).

With regard to claims 20 and 22, fig. 19 suggests the claimed subject matter thereof.

With regards to claim 23, it is inherent that the control unit is connected to the collimation device by electronic means and thus by a wire.

With regard to claims 25 and 26, the plurality of slits (62) of the prior art are the plurality of tools as claimed wherein each slit is interpreted as being in a separate zone (fig. 19).

With regard to claims 27 and 30, the plate (61) of the prior art is a metal plate of a given thickness.

With regards to claim 29, the prior art's fig. 20 suggests the claimed subject matter thereof.

With regards to claim 32, although the prior art teaches a plate (61) as the collimation device, said plate can be interpreted as a cylinder with the plurality of elements (62) on the periphery thereof.

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With regard to claims 35-41, said claims parallel that of claims 13-19. Thus, the Applicant's attention is directed to the corresponding comments for the rejection thereof.

With regard to claims 42, 44-46, 48, 49, and 51, said claims parallel that of claims 23, 25-27, 29, 30, and 32 respectively. Thus, the Applicant's attention is directed to the corresponding comments for the rejection thereof.

35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 24, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oikawa (5,625,661).

With regard to claims 6, 24, and 43, the prior fails to teach any one of the means as claimed as being actually remote-controlled by a computer. However, the Applicant has claimed that any one of the means is only "capable of being" remote-controlled by a computer. As such, it would have been obvious to one having ordinary skill in the art armed with said teaching that

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the means for emission of the prior art is "capable of being" remote-controlled by a computer. The motivation being that the means for emission of the prior art is that of an X-ray generator, and thus one would have motivation to control the generator from a remote location (ie. an adjoining room) so that one is not subject to the harmful effects of the X-rays. As support for such motivation, the Examiner points out that such remote control is common practice in X-ray rooms.

**RELEVANT ART**

The Applicant's attention is directed to the enclosed "PTO-892" form for the prior art made of record and not relied upon but considered pertinent to the Applicant's disclosure.

**CONCLUSION**

Any inquiry concerning this communication should be directed to Eric S. McCall at telephone number (703) 308-6968.

  
Eric S. McCall  
Primary Examiner  
Art Unit 2855  
June 26, 2003